

EQUIPMENT LISTS

PROJECT DESCRIPTION

A. EQUIPMENT TO BE SUPPLIED BY S.H.A. AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
9000	1 EA.	Detector rack retrofit.
9002	22 EA.	Four-channel-rack mounted amplifiers.
9003	3 EA.	Detector panel.
9004	3 EA.	Detector rack power supply.
9086	3 EA.	Cabinet w/telemetry (system cab) size 6 base mounted cabinet.
9087	3 EA.	Controller ASC II with telemetry.
9088	1 EA.	Controller, master ASC 10,000 w/ telemetry.
9089	306.5 S.F.	Flat sheet aluminum sign (white) consisting of :  9 EA. R3-5 (L) "LEFT ONLY", (30" x 36") mast arm mounted sign with hardware.  2 EA. R3-1(R) "NO RIGHT TURN", (30" x 30") mast arm mounted sign with hardware.  2 EA. R3-3(2) "NO LEFT or U TURN", (30" x 30") mast arm mounted sign with hardware.  Shield assembly signs:  (36" x 75") pole mounted with hardware. 3 EA. "EAST, MD 122, RIGHT ARROW" 3 EA. "WEST, MD 122, LEFT ARROW"  (30" x 51") pole mounted with hardware. 3 EA. "EAST, MD 122, RIGHT ARROW" 3 EA. "WEST, MD 122, LEFT ARROW"  (36" x 75") ground mounted with hardware. 1EA. "EAST, MD 122, RIGHT ARROW" 1EA. "WEST, MD 122, LEFT ARROW"

9090	101 S.F.	Flat sheet aluminum sign (green) consisting of:  4 EA. D3-2 " Security BLVD", dual faced sign, mast arm mounted (variable x 16")  1EA. D3-2 " Security BLVD" sign, mast arm mounted (variable x 16").  2 EA. D3-2 " ARROW Belmont AVE / Belmont AVE ARROW" dual faced sign, mast arm mounted ( variable x 16").  2 EA. D3-2 " ARROW Lord Baltimore DR / Lord Baltimore DR ARROW" dual faced sign, mast arm mounted ( variable x 16").
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B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
1001	2 EA.	Maintenance of traffic.
2003	48 C.Y.	Class 2 Excavation.
2004	8 C.Y.	Test pit excavation.
5004	300 L.F.	24" white heat applied permanent preformed thermoplastic pavement markings.
6003	100 L.F.	Monolithic concrete median 4 feet (Type A-1)
6004	1800 S.F.	4 inch conceret sidewalk.
8002	1 EA.	Adjust and re-ring exiting span wire.
8005	3 EA.	Delivery of the controller and cabinet to SHA.
8010	100 EA.	Furnish and install 12" signal head section.
8018	6 EA.	Furnish and install 8" signal head section.
8020	1 EA.	Furnish and install mast arm pole and 38' mast arm, (Note: four - 1 1/2" x 60").
8021	2 EA.	Furnish and install mast arm pole and 50' mast arm, (Note: four - 1 3/4" x 90).
8022	3 EA.	Furnish and install mast arm pole and 60' mast arm, (Note: four - 2" x 90").
8023	3 EA.	Furnish and install mast arm pole and 70' mast arm, (Note: four - 2" x 90").
8026	1 EA.	Furnish and install mast arm pole and twin 60/50 mast arm (Note: four - 1 3/4" x 90").
8028	8 EA.	Furnish and install microloop probe set with 1000' lead-in.
8029	17 EA.	Furnish and install microloop probe set - 500 lead-in.
8037	1 EA.	Remove and dispose material and equipment per assignment.
8038	12 EA.	Remove and dispose foundation 12" below grade.
8039	3 EA.	Remove existing controller, cabinet and galv. structure.
8040	90 L.F.	Furnish and install 1" galvanized conduit riser.
8042	100 L.F.	Furnish and install 2" polyvinyl choride electrical conduit (Schedule 80) trenched.
8044	3000 L.F.	Furnish and install 3" polyvinyl choride electrical conduit (Schedule 80) trenched.
8046	300 L.F.	Furnish and install 4" polyvinyl choride electrical conduit (Schedule 80) trenched.
8049	46 C.Y.	Furnish and install concrete foundation.
8051	30 L.F.	Furnish and install wood post 4" x 6".
8052	1200 L.F.	Furnish and install No. 6 A.W.G. stranded bare copper ground wire.
8053	100 L.F.	Furnish and install 1" electrical conduit galvanized sleeve.
8056	1000 L.F.	Furnish and install 4" polyvinyl choride electrical conduit (Schedule 80) bored.
8060	100 L.F.	Furnish and install 1" liquid tight flexible non-metallic conduit for detector sleeve.
8061	150 L.F.	Furnish and install electrical cable 1 conductor No.4 A.W.G. - THHN/THWN.
8063	2 EA.	Furnish and install electrical handhole.
8065	37.5 S.F.	Install ground mounted sign.
8066	370 S.F.	Install overhead sign.
8068	300 L.F.	Furnish and install 12 pair communication cable, jelly filled (underground).
8071	13 EA.	Furnish and install ground rod (3/4" dia. x 10' length).
8072	3 EA.	Furnish and install control and distribution equipment (120/240 v, 1 phase, 3 wire system).
8073	9300 L.F.	Furnish and install 2-conductor electrical cable (No. 14 A.W.G.) aluminum shielded.
8076	2640 L.F.	Furnish and install 5-conductor electrical cable (No. 14 A.W.G.).
8077	2000 L.F.	Furnish and install 7-conductor electrical cable (No. 14 A.W.G.).
8078	1000 L.F.	Furnish and install loop wire encased in flexible tubing (No. 14 A.W.G.).
8079	200 L.F.	Furnish and install sawcut for signal loop detector.
8084	3 EA.	Install controller and cabinet - base mounted.

I. GENERAL

This project involves the reconstruction of the traffic control signal at the intersections of MD 122 and Lord Baltimore Dr., MD 122 and Belmont Ave., and MD 122 and the I-695 outer off ramp. Interconnect cable shall be installed along MD 122 (Security Blvd.) east from Rolling Rd. to the I-695 off ramp in Baltimore County.

MD 122 (Security Blvd.) is assumed to run in an east-west direction.

II. INTERSECTION OPERATION

A. MD 122 and Rolling Road.

- The intersection operation shall remain in an eight-phase, fully-traffic-actuated mode with exclusive left turns for all approaches. Sampling stations shall be provided for the northbound and southbound approaches on Rolling Rd. and eastbound approach on MD 122.
- The existing controller in a base mounted cabinet shall be retro-fitted with six (6) four-channel rack mounted amplifiers, detector panel and detector rack power supply. A master controller unit shall be installed into the existing cabinet.

B. MD 122 and Lord Baltimore Dr.

- The intersection operation shall remain in a six-phase, fully-traffic-actuated mode with exclusive left turns for MD 122. Lord Baltimore Dr. and the entrance to the mall shall operate together. Sampling stations shall be provided for both the eastbound and westbound approaches on MD 122.
- A full-traffic-actuated, eight-phase controller with six (6) four-channel rack mounted amplifiers, detector panel, and detector rack power supply with all necessary equipment and their harnesses housed in a NEMA size "6" base-mounted cabinet shall be installed at this intersection.

C. MD 122 and Belmont Blvd.

- The intersection operation shall remain in a six-phase, fully-traffic-actuated mode with exclusive left turns for MD 122. Belmont Ave. and the entrance to the mall shall operate in a split phase. Sampling stations shall be provided for both eastbound and westbound approaches on MD 122.
- A full-traffic-actuated, eight-phase controller with seven (7) four-channel rack mounted amplifiers, detector panels, and detector rack power supply with all necessary equipment and harnesses housed in a NEMA size "6" base-mounted cabinet shall be installed at this intersection.

D. MD 122 and I-695 outer loop off ramp.

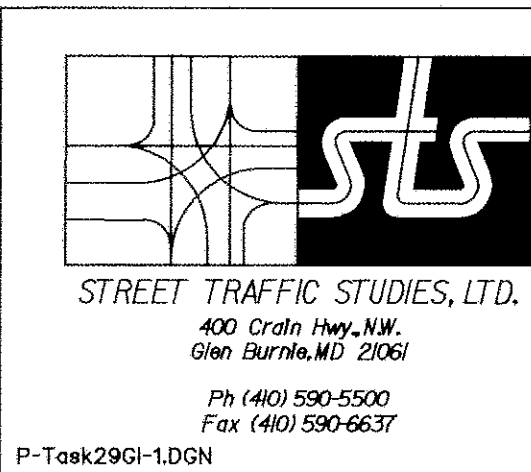
- The intersection operation shall remain in a three-phase, fully-traffic-actuated mode. MD 122 approaches shall operate together and the I-695 outer off-ramp shall operate alone. Sampling stations shall be provided for both eastbound and westbound approaches for MD 122.
- A full-traffic-actuated, eight-phase controller with three (3) four-channel rack mounted amplifiers, detector rack power supply with all necessary equipment and harnesses housed in a NEMA size "6" base-mounted cabinet shall be installed at this intersection.


III. SPECIAL NOTES:

- Upon completion of this project, the Contractor shall notify Mr. Robert Snyder at (410) 787-7631 to arrange for the phone line installation. The Contractor is to provide Mr. Robert Snyder with the nearest street address, zip code and phone number.
- All field wiring to the existing controller cabinets shall be terminated to the appropriate controller cabinet connectors by the contractor and labled. All other controller wiring shall be preformed by the S.H.A. Signal Shop. Contact Mr. Ed Rodenhizer at 410-787-7650, seventy-two (72) hours in advance of intended work.

Red Line Revision 9/4/00

GENERAL INFORMATION SHEET 1



 <b>MARYLAND DOT - STATE HIGHWAY ADMINISTRATION</b> <i>Office of Traffic &amp; Safety</i> <b>TRAFFIC ENGINEERING DESIGN DIVISION</b> <b>MD 122 (SECURITY BLVD.) FROM ROLLING ROAD TO I695 OFF RAMP</b>			
<b>DRAWN BY:</b> MILESKY	<b>COUNTY:</b> BALTIMORE	<b>TS NO.</b> GI-1	<b>SHEET NO.</b> 7 OF 8
<b>CHECK BY:</b> RRZ	<b>LOG MILE:</b> 00.00 TO 00.47	<b>T.I.M.S. NO.</b> D670	
<b>DATE:</b> 04/04/00	<b>F.A.P. NO.</b>	<b>S.H.A. NO.</b> XX1005885	
<b>SCALE:</b> N/A			